

Amendment to the Specification:

Please amend the specification as follows:

Delete paragraph **[0051]** and replace it with the following paragraph amended as shown:

[0051] In the exemplary embodiment of a device according to the invention that is shown in FIG. 1, the light source 2 is provided as a diode-pumped solid-state laser that emits at an optical wavelength of 532 nm and whose laser beam is expanded by the beam expanding optics 4 with the optical elements L1 and L2, such that it essentially illuminates the diffractive optical element 7 completely. The expanded laser beam is split into a pattern of multiple foci by using the collimator 6 with the optical elements L3 and L4 and the microscope objective 8, and is focused in the sample (liquid drops) at 12. The confocal volume elements in the sample volume that are illuminated by the focused partial beams are not shown in detail in FIG. 1. Denoted by 14 in FIG. 1 is a dichroic mirror that reflects the excitation light into the microscope objective 8 and thus toward the sample. The fluorescence emission emanating from the excited molecules in the confocal volumes is collected via the same objective 8 such that it passes through the dichroic mirror 14 to a bandpass filter 16. The bandpass filter discriminates the signal light from the Rayleigh scattered light and Raman scattered light. The fluorescence emission light is then directed onto the sensor chip 20 through the lens group L5 and L6. The sensor chip 20 is a CMOS chip with an integrated array of avalanche photodiodes with Geiger mode wiring. Also integrated are electronic components for operating the avalanche photodiodes and for signal processing, for example quench resistors, transistors, correlators and arithmetic circuits for further signal processing operations. The sensor chip 20 is read out by a computer 22, it being possible for any external evaluation components 24 to be inserted between the computer 22 and the sensor chip 20.